

Government Agencies Technology Exchange in Manufacturing (GATE-M)

MEETING SUMMARY

February 1, 2002

at the National Institute of Standards and Technology (NIST)

Welcome and Introductory Remarks

SUMMARY

- Dale Hall, Acting Director of the NIST MEL and GATE-M Panel Chair, introduced himself to the Panel. The Panel members did likewise.
- The following individuals participated in the meeting:
 - DOD: Dan Cundiff, OSD (via teleconference)
 - DOE: Hank Kenchington, OIT; and John Tribou, NNSA (via teleconference)
 - NASA: John Vickers, Marshall SFC (via teleconference)
 - NSF: George Hazelrigg, Directorate for Engr.
 - DOC/NIST: Dale Hall and Dave Stieren, NIST MEL
- Dale Hall indicated his interest in establishing and working toward both short- and long-term goals and deliverables for the GATE-M Panel.

ACTIONS

- None identified.

Discussion of Expectations of GATE-M Goals and Deliverables

SUMMARY

- Dale Hall solicited each agency's view regarding GATE-M short-term and long-term goals and deliverables, along with what the current status of each agency's commitment to GATE-M is. The agency responses follow.

DOD:

- The sharing of knowledge and leveraging of information across the agencies was identified as being important to the success of GATE-M in the short-term. The DOD ManTech Program, with the JDMTP Panel and technical Subpanels, were discussed as models of how this currently successfully occurs within DOD.
- Also in the near-term it was suggested that GATE-M should be focused on specific technology opportunities, as opposed to national initiative-type issues.
- The development of a framework for a national manufacturing initiative was then discussed as being the main GATE-M long-term deliverable, and successfully creating such an initiative would require the Panel to determine how to effectively leverage other activities.

DOE OIT:

- The primary issue that GATE-M should address is how the Panel can add value and contribute to the address of both national goals and the high-level priorities of the individual agencies.
- Power and energy transformation initiatives were provided as examples of such national goals and high-level priorities from the perspective of DOE.

DOE NNSA:

- The sharing of manufacturing information across the various government agencies was echoed as being an important short-term issue for GATE-M.
- A spoke and wheel metaphor was provided to illustrate the GATE-M long-term objective. In this metaphor, each agency would provide a spoke of activity that would address its own needs. The several spokes would then be combined together to form a wheel that addresses a broad, national-level need or issue. The DOE Advanced Design and Production Technologies (ADAPT) Program was discussed as a viable possibility to represent the DOE NNSA spoke in the GATE-M wheel.

NASA:

- NASA expressed 2 levels of interest in GATE-M.
- The first level, which would be addressed in the short term involves the leveraging of technology within the Panel to allow each agency to gain visibility into the R&D activities across all the agencies. Critical to the success of this activity is the existence of mechanisms to share information easily. GATE-M must identify such mechanisms.
- The first level activity would result in the ability to identify a common strategy for addressing critical technology issues on a broad scale, which would then lead to NASA's second level of interest — the conduct of coordinated R&D.
- Through the conduct of coordinated R&D on a broad basis, agencies could conceivably share both funding and results. It would be critical that any such approach must target common strategic technologies of the various agencies.
- Discussion ensued about the creation of a Venn diagram associated with each agency's critical technologies, and GATE-M would seek to identify the areas of intersection across the agencies.

NSF:

- It was stated that the effectiveness of NSF-funded research is very closely related to the awareness and leverage of other activities. As such, a basic interest of NSF in GATE-M is providing a means to keep the efficacy of NSF funding very high.
- It was also noted that NSF would consider its funding efficacy to be successful if other government agencies perform their mission better as a result of NSF funding to universities.

DOC/NIST:

- NIST input focused on summarizing the convergence that the Panel was achieving regarding GATE-M goals and deliverables. This synopsis is provided below.
- GATE-M needs to be able to point to something in the short term that it is developing or that it has produced, which facilitates the core mission of each agency. To do this the agencies must, in a combined manner, identify technology and programmatic intersections and areas of commonality. GATE-M is an appropriate vehicle to coordinate this.
- After identifying such common technologies, programs, and interests, GATE-M can make assertions as a group regarding ways to effectively support a national agenda.
- GATE-M should strive to ensure on a broad basis that manufacturing is strong and invulnerable. Manufacturing should be a visible part of this country's national goals. A difficult challenge will be to determine what manufacturing can do to advance other, national-level initiatives — making a strong link between manufacturing and such initiatives.

There was also discussion about possible mechanisms to communicate the GATE-M story and results of the GATE-M activities, especially if they lead to the successful development of a national perspective regarding how manufacturing can contribute to national goals. Mechanisms that were discussed included a senior level/executive forum that would demonstrate to government leaders how manufacturing could support their various agency and national-level priorities. During this discussion NRC mentioned its ability to attract Congress to high-level events, if that were determined to be appropriate.

ACTIONS

- NIST will initiate the conduct of an exercise within the Panel to collect a description of each agency's priorities and core technologies. NIST will develop a process to efficiently gather this information that will then be communicated to the Panel, and NIST will attempt to initiate this exercise in February.
- In addition to collecting the data associated with the exercise, NIST will conduct an initial analysis of the information provided by the agencies in an attempt to create a taxonomy to guide how the Panel might proceed forward.
- This exercise, its results, and the initial analysis will be the focus of the next GATE-M meeting, at a time and place to be determined.

Charter Updates

SUMMARY

- The latest version of the Panel charter was discussed. This version, dated January 2002, included two new clauses that were added by an additional legal review at NIST.

- Panel members generally indicated that it was likely that these clauses would not create new legal issues within their respective agencies.
- It was decided that each agency would run this latest version of the charter through one more legal review and feed comments back to NIST within 2 weeks to begin the signature process.
 - This additional review should specifically address any outstanding legal issues, as well as any potential changes to each agency's signatory.

ACTIONS

- Each agency should review the latest, January 2002, version of the charter, and provide comments to NIST within 2 weeks, or by COB February 15, 2002.
- Upon receiving agency comments, NIST will incorporate all comments into a new final version of the charter and will begin the signature process.
 - NIST will sign the charter first, then forward the charter to the next agency for signature, and so on. The details of this process will be communicated to the Panel by NIST in conjunction with the initiation of the process.

Relationship with the National Research Council (NRC)

SUMMARY

- Toni Marechaux, Director, NRC Board on Manufacturing and Engineering Design (BMAED), provided the Panel with an overview of the NRC to initiate a dialogue regarding ways in which the NRC and GATE-M might interact.
 - The NRC overview included discussion about the BMAED, the upcoming Materials Forum in March, and focused studies conducted by NRC.
- There was brief discussion about the appropriateness of establishing a formal liaison between GATE-M and NRC, but it was decided that future interaction would best be handled on an ad hoc basis as circumstances warranted NRC presentations or other forms of interaction.

ACTIONS

- Toni Marechaux will provide the Panel with a fact sheet about BMAED.
- Additional interaction may occur between the NRC and NIST (on behalf of the Panel) to determine future appropriate GATE-M participation points for the NRC, including GATE-M possibly being represented at the next BMAED meeting.

Integrated Manufacturing Technology Initiative (IMTI) Update

SUMMARY

- Richard Neal, IMTI Director, provided the Panel with an overview and presentation about IMTI and its current activity focus. It was communicated that IMTI is a government/industry partnership to support the nation's manufacturing infrastructure.
 - The IMTI overview included discussion about IMTI's 3 main activity areas: roadmapping, the Manufacturing Analyst for Science and Technology (MAST) database, and a focus on matchmaking and collaboration facilitation.
 - IMTI conducts focused workshops as a primary vehicle to assist in the conduct of its activities.

ACTIONS

- Richard Neal will provide the Panel with a copy of the IMTI overview presentation.
- Additional interaction may occur between IMTI and NIST (on behalf of the Panel) to determine future appropriate GATE-M participation points for IMTI.

Other Business

SUMMARY

- The involvement of GATE-M in the aerospace industry's June 2002 SAE Advanced Manufacturing Technology Conference was mentioned by NIST.
 - There will be a GATE-M technical session among the conference's parallel tracks that was co-conceived by NIST and NASA. This session will consist of presentations from GATE-M agencies to highlight programs relevant to aerospace manufacturing. NIST will be contacting the agencies to solicit their participation.
 - There is also an opportunity for GATE-M to be presented during a plenary session of the Conference. The likely presenter would be the Panel Chair. NIST is coordinating this with Pratt & Whitney, who is hosting the conference.

ACTIONS

- NIST will contact the agencies regarding their participation in the GATE-M technical session discussed.
- NIST will coordinate GATE-M involvement in the plenary session discussed.